Meeting Minutes
Health Information Technology Council Meeting

July 1, 2013
3:30 – 5 p.m.

One Ashburton Place, 21th floor Matta Conference Room
Boston, MA

Meeting Attendees

Name	Seat	Organization	Attended
John Polanowicz	Secretary of Health and Human Services or Designee (Chair)	*Secretary of the Executive Office of Health and Human Services*	Yes
Manu Tandon	Secretary of Health and Human Services or Designee (Chair)	*Secretariat Chief Information Officer of the Executive Office of Health and Human Services, Mass HIT Coordinator*	Yes
John Letchford (Designee for Glen Shor)	Secretary of Administration and Finance or Designee	*Chief Information Officer, Commonwealth of Massachusetts*	Yes
David Seltz	Executive Director of the Health Policy Commission or Designee	*Executive Director of Health Policy Commission*	Yes
Aron Boros	Executive Director of the Center for Health Information Analysis (CHIA)	*Executive Director of Massachusetts Center for Health Information and Analysis*	No
Laurance Stuntz	Director of the Massachusetts e-Health Institute	*Director, Massachusetts eHealth Institute*	Yes
Eric Nakajima	Secretary of Housing and Economic Development or a Designee	*Assistant Secretary for Innovation Policy in Housing and Economic Development*	Yes
Julian Harris, MD	Director of the Office of Medicaid or Designee	*Director of Office of Medicaid*	Yes
Meg Aranow	Expert in Health Information Technology	*Senior Research Director, The Advisory Board Company*	Yes
Deborah Adair	Expert in Health Information Privacy and Security	*Director of Health Information Services/Privacy Officer, Massachusetts General Hospital*	Yes
John Halamka, MD	From an Academic Medical Center	*Chief Information officer, Beth Israel Deaconess Medical Center*	No
Normand Deschene	From a Community Hospital	*President and Chief Executive Officer , Lowell General Hospital*	No
Jay Breines	From a Community Health Center	*Executive Director, Holyoke Health Center*	No
Robert Driscoll	From a Long Term Care Facility	*Chief Operations Officer, Salter Healthcare*	Yes
Michael Lee, MD	From a Large Physician Group Practice	*Director of clinical Informatics, Atrius Health*	No
Margie Sipe, RN	Registered Nurse	*Nursing Performance Improvement Innovator, Lahey Clinic*	Yes
Steven Fox	Representative of health insurance carriers	*Vice President, Network Management and Communications, Blue Cross Blue Shield MA*	No
Larry Garber, MD	Experience or Expertise in Health Information Technology	*Medical Director of Informatics, Reliant Medical Group*	Yes

Name	Seat	Organization	Attended
Karen Bell, MD	Experience or Expertise in Health Information Technology	*Chair of the Certification Commission for Health Information Technology (CCHIT) EOHED*	Yes
Kristin Madison	Expert in Law and Health Policy	*Professor of Law and Health Sciences, Northeastern School of Law, Bouvé college of Health Sciences*	Yes
Daniel Mumbauer	From a Behavioral Health, Substance Abuse Disorder or Mental Health Services Organization	*President & CEO, Southeast Regional Network, High Point Treatment Center, SEMCOA*	No
Patricia Hopkins, MD	Representative from a Small Physician Group Practice	*Rheumatology & Internal Medicine Doctor (Private Practice)*	No

Guest

Name	Organization
Robert McDevitt	Executive Office of Health and Human Services (EOHHS)
Eric Hilman	Executive Office of Health and Human Services (EOHHS)
Kathleen Snyder	Executive Office of Health and Human Services (EOHHS)
Kimberly Grose	Executive Office of Health and Human Services (EOHHS)
Hoda Sayed-Friel	MEDITECH
John Valutkevich	MEDITECH
Sean Kennedy	Massachusetts eHealth Institute (MeHI)
Erich Schatzlein	Massachusetts eHealth Collaborative (MAeHC)
Carol Jeffery	Massachusetts eHealth Collaborative (MAeHC)
Jennifer Monahan	Massachusetts eHealth Collaborative (MAeHC)
Micky Tripathi	Massachusetts eHealth Collaborative (MAeHC)
Lisa Fenichel	E-Health Consumer Advocate
Ian Rowe	Orion Health
Adrian Gropper	Patient Privacy Rights
Claudia Boldman	Executive Office for Administration and Finance (ANF), Information Technology Division (ITD)

Meeting Minutes:

Meeting called to order – minutes approved

The meeting was called to order by Manu Tandon 3:39 pm.

The Council reviewed minutes of the June 3rd, 2013 HIT Council meeting. The minutes were approved as written.

Discussion Item 1: Mass HIway Implementation Updates (Slides 3-28)

See slides 3-28 of the presentation. The following are explanations from the facilitator and comments, questions, and discussion among the Council members that are in addition to the content on the slides

Massachusetts eHealth Collaborative – Presented by Massachusetts eHealth Collaborative CEO, Micky Tripathi (slides 4-12)

The Council was provided with a background on the Massachusetts eHealth Collaborative's (MAeHC) participation with the Mass HIway. MAeHC's Quality Data Center (QDC) was part of the Golden Spike event on October 16th, 2012; and with Beth Israel Deaconess Medical Center (BIDMC), MAeHC was one of the first to be "live" on the HIway with production transactions.

 (Slide 5) MAeHC Pilot Program: 2005-2008 – MAeHC was founded to run some pilot programs that were funded by Blue Cross Blue Shield of Massachusetts (BCBS MA). Pilot projects were with three communities; Brockton, Newburyport, and North Adams which were together about 600 clinicians practicing in over 200 office locations. (The other red dots on the slide represent other communities that responded to MAeHC's RFP). MAeHC created and stood up three stand-alone Health Information Exchanges (HIEs) and on top of these established a quality data center and data warehouse to extract clinical data from the electronic medical records (EMRs)

(Slide 6) MAeHC Pilot Project Architecture and Data Flows – The Council was briefed on the architecture of the pilot project. MAeHC paid for four electronic health record (EHR) systems; eClinicalWorks (eCW), General Electric (GE), Allscripts, and NextGen and allowed providers to choose from among them. Then MAeHC facilitated the standing up of three standalone HIE's and the data warehouse on top of that. MAeHC partnered with Computer Sciences Corporation (CSC) as the technical consultant and data center host and the Massachusetts Health Quality Partners (MHQP) as quality measures consultant. This was in 2005 and 2006 which is 3 generations ago in terms of industry maturity and there were no well developed quality measures at the time. MHQP was instrumental in helping take the limited process measures of the time and make them into clinical measures that could be used to evaluate the pilot projects.

The QDC became an asset in itself and people realized that this is not just a research endeavor, this is something that could be used to provide information back to clinicians to help them improve care in a more real time way.

(Slide 7) Life on the Bleeding Edge: 2006-2008 – The council was briefed on the lessons learned by MAeHC during the pilot projects. Micky noted that the Mass HIway is actually solving many of these issues for us.

All of the standards were developed by MAeHC at the time; Larry Garber completed our EHR RFP based on Health Level Seven (HL7); MAeHC borrowed standards from wherever they could find them; nationally EHR certification didn't exist; there were no nationally approved standards for anything – content, transport, measurement; there was no meaningful use. MAeHC was trying to develop and enforce usage requirements through contracts with the pilot participants, which was always a challenge.

The QDC was originally designed to leverage the community HIE's and it lived downstream from those. The information flow was consent based and patient matching happened within the HIE's. Patient identity was pseudonymized; patient data was stripped of patient identifiers for storage at the QDC, but it could be re-identified later for care purposes. The Collaborative did not want the data warehouse to contain patient names.

The QDC model has now changed as MAeHC is now serving in a bilateral way as a data agent for clinical entities and they want that data identified so they can identify missed patients for a given measure and can increasingly use the QDC for care management purposes in a dynamic, real-time way.

(Slide 8) Performance Measurement Process Steps – The council was briefed on the end-to-end workflow of data warehousing. Many people just focus on the analytics (Micky cited the startups and academics focused on analytics). MAeHC has found that this part (pointing to analytics on slide) is not nearly as hard as that part (pointing to documentation and extraction, data transport, validation and analysis on slide). That is where all the issues are such as identifying; what data do you need, how is it being documented, how do you get it into an EHR, how you get it out of an EHR, and then how you do the remediation and improvement.

Fortunately, with the HIEs that are in this part of the country, MAeHC has been able to leverage formalized HIEs to take care of the transport. The QDC uses the New England Healthcare Exchange Network (NEHEN), the Mass HIway, and the Health Information Xchange New York (HIXNY) for transport of clinical information that comes to us from a variety of projects.

The QDC runs analytics that customers want MAeHC to run. Originally it was Meaningful Use quality measures, Blue Cross Alternative Quality Contract (AQC) measures, Physician Quality Reporting System (PQRS) measures. QDC follows customers as they start to mature and now does Pioneer Accountable Care Organization (ACO) measures etc… and increasingly care management types of things where it is not just static measures anymore but inserting quality measurement back into the EHRs so clinicians can have it for care management. QDC is increasingly moving to that dynamic vision and the HIway is instrumental in that.

(Slide 9) BIDCO QDC – The Council was briefed on the workflow for capturing and reporting data for the Beth Israel Deaconess Care Organization (BIDCO). There are three primary EHRs that feed the BIDCO QDC. BIDCO is the care network that comprises both hospital based physicians at Beth Israel Deaconess

Medical Center and ambulatory physicians who are not employed by the hospital, but are affiliated. BIDCO has multiple EHRs that they need to bring together into a unified view so they cannot do this within WebOMR, or eCW, or ALTOS – an oncology solution. Increasingly Beth Israel is bringing others under their umbrella so there is an increasing problem of multiple EHRs that BIDCO needs to have a single view of for external reporting and increasingly for supporting internal management functions.

The QDC now gets data, in real time, from WebOMR, eCW, and ALTOS. Originally all of that was through NEHEN. Volume as of beginning of the month was 5.6 million care events/C-32 records.

A care event C-32 record provides a structured summary of the encounter and is generated automatically after any one of the BIDCO physicians lock a note (equivalent of signing off on a patient's chart) and is sent automatically over the HIway or NEHEN to the MAeHC QDC. Current volume is 5,000 records per day.

Since the Golden Spike all of the WebOMR data has been moved over to the HIway. Now working on migrating eCW and ALTOS from NEHEN to the HIway. This is a vendor by vendor conversation. NEHEN, which is also staffed by MAeHC, is planning to migrate all clinical users to the HIway by the first quarter of 2014 and is shutting down all of their clinical operations. MAeHC and BIDCO are the first NEHEN customers to cutover to the HIway followed by Tufts who is switching over now.

(Slide 10) AHI QDC – The Council was briefed on the HIXNY data exchange model. Health Information Exchange New York (HIXNY) QDC follows a similar model as BIDCO's, but with many more EHR's. The customer is the Adirondacks Health Institute, an affiliation of practices in NY – Hudson Headwaters health center, a 100 clinician health center, plus many small ambulatory practices. Altogether there are about 350 physicians on 6-7 different EHR's. Currently, there are interfaces with all of the sites and it uses the same model: at the end of an encounter the EHRs automatically generate a C-32 which is sent to MAeHC through HIXNY. Ideally would like some ability for HIXNY to send messages to HIway and then MAeHC could do this just through HIway feed. Once the HIway and HIXNY work out all of the Health Information Services Provider (HISP) to HISP details, MAeHC will do everything through its HIway connection.

 (Slide 11) HIway Implementation Process – The Council was briefed on the HIway implementation timeline for the MAeHC QDC and BIDMC project. The project started at the Golden Spike event (October 16, 2012) and received a production transaction – but did not flip over the day to day workflow onto the HIway until later. See slide details for the full timeframe and workflow for the MAeHC/BIDMC relationship. The QDC is just a receiver of information and could not do anything on the HIway until its partners were ready to.

MAeHC experienced some technical issues with the integration of the Local Access Network Distribution (LAND) device at the QDC. When the QDC was setting up the LAND device they had a lot of issues around message formulation, file conventions, and some other quirky issues that required workarounds. For example: QDC receives approximately 5,000 messages per day and a unique folder was being created for each individual file. There was back and forth with Orion and it couldn't be fixed so QDC had to write a script to remove the folders after messages were processed.

- Question (Larry Garber): Are the transactions done through a file drop as opposed to a web service?
    o Answer (Micky Tripathi): Yes, the transactions are done through a file drop process and every file creates a new folder. It is working now, but may need to be revisited.

(Slide 12) Our Overall Experience – The council was briefed on the overall experience, current status, and future plans of the MAeHC QDC and BIDMC workflow process. BIDMC had the same kind of issues. They had security issues with the LAND appliance behind their firewall. There were a bunch of issues with the LAND hardware requiring three visits; one to upgrade, one to reconfigure, and one to replace the LAND appliance. None of the issues were earth shattering but were all issues that needed to get resolved.

The QDC moved into testing in March with BIDMC. Go live was early May, live production transactions from BIDMC started in June. To start there were parallel transactions with BIDMC using HIway and NEHEN for testing and to improve validity of the transactions. Two weeks ago the Gateway to NEHEN was shut off, and now QDC is fully on the HIway

In the implementation process there were lots of growing pains – but would consider these normal teething pains for early adopters – none of them "earth shattering" – and the Last Mile and Operations teams are now up and working. As a customer, QDC had to be patient and flexible and tolerate extreme ambiguity.

Current status – The HIway seems to be working perfectly, there are no issues and transactions are being delivered faster than when previously connected through NEHEN. The QDC has received over 80k records from BIDMC to date. The future plan includes migrating all eCW, ALTOS, and GE practices on to the HIway as soon as possible. MAeHC is also in talks with three initial customers; Central MA IPA, Lawrence General Hospital and Children's Hospital and will bring them right on to the HIway without the NEHEN interim step.

Overall, have had a great experience with the HIway, have gone through the regular growing pains that any of us would have expected, and are hoping that this is a flexible model and community utility that isn't itself baked into the HIE. Can use the "public pipes" for transport but have this be data aggregation "at the edge" without the HIway having to persist patient clinical information.

- Question (Laurance Stuntz): You mentioned integrating eCW, GE, and others. Is the work you've done to integrate them applicable or re-usable for the typical Direct interface? Or is the BIDMC work independent of those vendors?
    o Answer (Micky Tripathi): No it is not independent. With all of the conversations with eCW about HISP to HISP – we're waiting for them. Each vendor is a little bit different. For example, what we've seen from MEDITECH. The automated data flows are different than the Direct integration which is user initiated messaging. May have 2 layers of integration to figure out but are just now at the details of figuring those out.

- Question (Karen Bell): Great presentation and you are doing wonderful work. Is there a longer term plan to do reporting on behalf of provider groups, or to create registries for providers who are using EHRs that don't have registry functions?
  - Answer (Micky Tripathi): We can do reporting for provider groups now on customers' behalf and it's up to the customer whether they want us to do it or not. For example, Beth Israel, for reporting for the Pioneer ACO has to upgrade to the G-Pro tool. 75% of the content they needed for the G-pro we were able to do automated from the data warehouse. The 25% that we couldn't do was for data that we don't get – things like falls risks, waiting time in a emergency room, or measures that are not captured in an EMR – if we don't get them we can't help them upload that information. We can do any reporting on behalf of a customer that they want us to do in any electronic reporting format they want. Registry functions that are beyond meaningful use. Practices that are certified with Certified Quality Measures (CQMs) – but they may or may not be happy with them since it doesn't do AQC measures or anything beyond meaningful use. The QDC also allows for the prospect for blinded cross entity benchmarking, which would offer blinded peer measures for measuring and comparing data to other organizations.

Meditech – Presented by MEDITECH Vice President of Strategy and Marketing, Hoda Sayed-Friel (slides 13-28)

(Slide 14) Agenda – The Council reviewed the agenda topics to be presented.

(Slide 15) We Have a Strong Local Presence in Massachusetts – The Council was briefed on the market share of healthcare organizations that utilize MEDITECH software.   MEDITECH has an opportunity to bring a large number of organizations on the HIway using the same set of standards and implementation process. When MEDITECH connects clients to the HIway, the organizations will purchase a software license to the Continuity of Care Document Suite of interoperability interfaces.

Once the initial set of six pilot hospitals are connected to the HIway and the process has been fully tested, any Massachusetts based MEDITECH client will be able to utilize the same implementation process to connect to the HIway without a lot of "heavy lifting."

MEDITECH also has a large market share of Long Term Care (LTC) facilities in Massachusetts. Not much attention is given to LTC facilities, and once the acute care and critical access hospitals have been implemented more consideration should be given to these organizations. Sharing information during transitions of care is essential for patients being transferred from acute care facilities to LTC facilities. LTC facilities using MEDITECH would essentially use the same process to connect to the HIway as the acute care hospitals.

Special consideration will need to be given to inpatient psychiatric hospitals to determine what information could be shared using the HIway, and what consent and pre-consent policies need to be in place in order to send information over the HIway.

MEDITECH offers three software platforms that are in place at 87 Massachusetts hospitals. The three software platforms use the same interoperability structure, but the end user interface appears different because each is a separate platform.

- Question (Secretary Polanowicz): Does the tally of 87 hospitals include all long term care, rehab, and other facilities?
    - o Answer (Hoda Sayed-Friel): The tally includes all inpatient facilities. A list can be provided to the council to indicate how the counting is done.

(Slide 17) Transitions of Care – The Council was briefed on the Transitions of Care Meaningful Use measures for stage 1 and stage 2. As organizations move to stage 2 Meaningful Use, more than 50% of transition of care and outbound referrals must contain a summary of care document. MEDITECH is providing their clients with the ability to send Continuity of Care Documents (CCDs) that use standard nomenclature and discrete data elements for the different sections in a CCD. The standard nomenclature for discrete data elements include SNOMED (Systematized Nomenclature of Medicine), CPT (Current Procedural Terminology), ICD (International Classification of Diseases), CVX (Vaccine Administered) codes, and RxNorm terminology.

(Slide 18) Utilizing Direct in MEDITECH Platforms – MEDITECH has incorporated the Direct protocol into the software platforms being offered to customers. The Direct protocol is being integrated in the pilot practices using Secure/Multipurpose Internet Mail Extensions (S-MIME)/ Simple Mail Transfer Protocol (SMTP), and may use Cross-enterprise Document Reliable Interchange (XDR)/ simple object access protocol (SOAP) version in the future. All of this is available to Meditech customers - if they buy the original CCD suite - MEDITECH just added the Direct on top of that.

(Slide 19) Direct Components – MEDITECH did not create its own HISP and is "HISP Agnostic," and has engineered a way to connect to any HISP. Determining methodology for recording HISP addresses and making them available to users will be an important step when connecting to the HIway. Meditech can manage certificates, addresses, and directory lookups.

(Slide 20) Workflows – Currently the only item that can be sent through the SMTP version of the Direct message is a CCD. May look into XDR so that there will be more flexibility in what can be sent. At time of discharge/departure from a hospital or emergency room visit, a CCD is automatically generated by the Meditech system to be shipped out to other sources. The CCD can be sent to a Primary Care Provider (PCP), long term care facility, or other locations, as long as HISP address is available. Address can be defaulted to the patient's PCP. Patients also have the opportunity to compile a CCD on the fly and send that summary to a physician if the HISP address is available.

(Slide 21) Transitions of Care: Consider the Workflow – MEDITCH has fit their Direct solution into pre-existing workflows to ensure clinicians can easily utilize actionable CCD summaries.

(Slides 22-23) Direct Enabled Message Center – MEDITCH has designed workflows for receiving "unsolicited CCDs" into mailboxes for processing once a patient arrives and is matched to the incoming record. The CCD then gets distributed to the care team within the facility. This places the responsibility

for patient matching with the medical records staff rather than burdening clinical staff with the extra step. When the clinician sees the patient, the CCD is already in the system for them. This also solves for the situation where a CCD is received but the patient does not show up – The medical records staff can handle this.

- Question (Larry Garber): The slide indicated that you received a CCD as well as style sheet. Do you expect a style sheet to be able to view the content, and do you send style sheets outbound?
  - Answer (John Valutkevich): Can send and receive the style sheets using a specific part of the CCD.
  - Answer (Hoda Sayed-Friel): When we parse the CCD, we actually reformat it in a way that you can see the whole report or sections of the report.

 (Slide 24) Send CCDA Outbound via Discharge – The slide depicts an automation of workflows; the discharging facility sends a Direct Message. Medical records can also send a CCD "on the fly" as well.

 (Slide 25) Send CCDA Outbound via Portal – The council was briefed on the process for patients to send a CCD from the patient portal. A patient will need the provider HISP or eHealth Exchange address to send information to a provider. Meditech does not want patients to put in a providers email address or to send clinical information to a provider so there are instructions to the patient regarding how to obtain a providers eHealth Exchange address. When a patient is discharged or departed, a CCD is put together and shipped out to the designated care team and a copy of the CCD is posted on the patient portal. Patients may view and download their information which meets the Meaningful Use as well as the portability requirement. Envision that the "search" function could hook into any library of HISP addresses.

- Question (Laurance Stuntz): Is there any reasons why a patient couldn't have the CCD sent to their direct address as well, like a HealthVault account?
  - Answer (Hoda Sayed-Friel): If they had a Direct address they could do this.
- Question (audience member): Can you define an unsolicited CCD?
  - Answer (Hoda Sayed-Friel): An unsolicited CCD is a CCD that is sent for a patient that does not have an appointment. The receiving organization does not know when the patient is coming. This could be for a referral that is not booked yet, or an emergency situation where a provider sends a CCD for a patient that is being transported to the emergency room.
  - Follow up question (audience member): Will it go to one department?
    - Answer (Hoda Sayed-Friel): It's going to go right to medical records to process. Same as faxing workflow in hospital where an incoming record is matched to a specific patient. Similar workflow in an office setting where a nurse manager or office staff person may be processing incoming messages.
- Question (Larry Garber): When a CCD is sent by a patient from the patient portal will the receiving physician know the initiator of the message or whether it is a provider or patient?
  - Answer (Hoda Sayed-Friel): Current SMTP protocol may not contain information about the initiator of the message, but will identify the sending facility.

- Question (Larry Garber): Does a patient need a Direct address to send information from the patient portal?
  - Answer (Hoda Sayed-Friel): The patient does not need a Direct address to send via the patient portal.
- Question (Larry Garber): Are you working here in the state of Massachusetts to make the provider address look-up coming from the state's HIE?
  - Answer (Hoda Sayed-Friel): Meditech has begun initial discussions with the state on how to search HISP addresses and what protocols will be used for this. There are not clear standards for this but Meditech can create a methodology for this.
  - Answer (John Valutkevich): In the portal, the patients have an option to send an existing CCD or to compile a new CCD – in case where labs were resulted a few days later than discharge summary. So sender address is the facility that compiled the ccd.
- Question (Deb Adair): Who maintains the physician and organization addresses?
  - Answer (Hoda Sayed-Friel): The value of the HIway brings would be a central repository for all those HISP addresses. HIway will also need to work on integrating vendor and other community HISPs and how to reconcile addresses. These are details that still need to be worked out, but there is enough functionality to begin work with the pilot group testing infrastructure and the ability to share CCDs. Future work can be done with how to handle the different HISP addresses.

(Slide 26) Mass HIway MEDITECH Pilot Sites – The Council reviewed the list of pilot organizations and the software platforms in place at each organization. The sites currently signed up to participate in the pilot program are Berkshire Hospital, Beth Israel Deaconess (Milton and Needham campuses), Harrington Hospital, Holyoke Hospital, Jordan Hospital, Winchester Hospital, and Exeter Hospital in New Hampshire. Work is already in progress with Jordan and Holyoke hospitals, and MEDITECH is waiting on Berkshire and Winchester hospitals to gives dates to get started. All of the hospitals have the software needed to join the HIway. Before beginning with the pilots, MEDITECH is testing integration with the HIway using an internal test system to work through any difficulties and issues.

Public health information can also be sent through the HIway for lab data, Syndromic surveillance data, and immunization registry information, once the HIway and Department of Public Health (DPH) has given the queue to being sending information.

- Comment (Manu Tandon): We can do it now.
- Question (Meg Aranow): When do you expect pilots to start?
  - Answer (Hoda Sayed-Friel): This summer, July and August. The pilot kick-off was last Monday. There were some questions with regard to consent forms and how consent is handled. MEDITECH has the ability to capture paper consents and record opt-in/out consent in the EHR. With the release of XDR capability, it will facilitate the use of Basic Patient Privacy Consents (BPPC) which will give the ability to record and enforce consent.

Working with the Last Mile program to get organizations engaged and educated on the process. MEDITECH is going through a readiness assessment, and looking to figure out which pilot hospitals would actually exchange information with the other pilots. BIDMC will likely be a receiver of information from most other participants as many patients are referred to BIDMC for care. There may be a need to increase number of pilots to increase the likelihood of having common exchange partners.

(Slide 27) MEDITECH Recommendations – (Slide 28) Summary – Slides were shown but not discussed

- Question (Larry Garber): When MEDITECH brings hospital onboard, will there be transaction fees charged?
    - Answer (Hoda Sayed-Friel):   MEDITECH does not charge transaction fees. MEDITECH charges a set amount for the interoperability interface and monthly maintenance fees. (Applause from the council) MEDITECH gave the idea of transaction fees a lot of thought, but does not think transaction fees make sense and would potentially decrease interest in the HIway program. (More applause from the council) MEDITECH also recently reduced the price of the CCD interface to a flat fee regardless of organization size and number of transactions sent. The CCD suite software package includes Cross Enterprise Document Sharing (XDS)-A and XDS-B which enables a provider to query another organization and receive a response. The query/response protocol is available now and has been tested in other states, so will be ready for the HIway Phase 2 go-live.
- Question (Secretary Polanowicz): When you were identifying the hospitals to pilot, did you talk to the Steward system? The Steward system has 10 hospitals and is already trying to share data. The Pilots listed, with the possible exception of Jordan Hospital sending information to BIDMC or the possible small scale transactions between other organizations, there are not a lot of logical "pitchers and catchers" here. I am meeting with Steward organization tomorrow and can speak to them about participating.
    - Answer (Hoda Sayed-Friel): MEDITECH did approach the Steward organization, but they declined the early pilot timeframe due to other responsibilities and priorities. Steward would be a good candidate due to the wide-spread geographical location of their hospitals and offices. Another option would be to invite Athena and eClinicalWorks physician practices to participate as counterparts to the pilot hospitals to build exchange potential. This would require MEDITECH to deal with the HISP address issue and HISP to HISP transactions, and we may not be ready to explore the additional requirements at this time.

Discussion Item 2: Advisory Group Discussion & Updates presented by the Massachusetts eHealth Collaborative CEO Micky Tripathi (slides 30-39)
See slides 30-39 of the presentation. The following are explanations from the facilitator and comments, questions, and discussion among the Council members that are in addition to the content on the slides

We have not had a chance to synthesize feedback yet from the Advisory Group meetings last week. Instead, we will discuss the materials that were presented to the Advisory Groups. The groups discussed the high-level preliminary design concept for the Mass HIway Phase 2 planning. The EOHHS and Orion

teams have been working on the Phase 2 concepts of search and retrieve. Planning discussions included consideration for the existing landscape, emerging federal standards, and the future of Meaningful Use; with a goal of determining how to align all the current information into something achievable that will help improve quality, safety, and efficiency of care. The high-level design concept was shared with the Advisory Groups for feedback and discussion.

(Slide 31) Mass HIway Phasing – The Council reviewed the Mass HIway Phasing approach including Phase 1 services of send and receive, and Phase 2 services of query and retrieve.

 (Slide 32) Phase 1 functions: User-to-User Push – The Council was briefed on the provider workflow for sending and obtaining information from another organization through the Mass HIway. The workflow discussion included the patient consent process, provider address look-up, and push transaction process. The process is essentially secure email with a facilitated service provided by the HIway to allow for the look-up of a provider address for sending information.

(Slide 33) Framework for Query for a Patient Record: Current Direction of Federal Certification Approach for MU Stage 3 – The Council was briefed on the current approach for the HIway to leverage standards being developed on a federal level, and to take advantage of the technology certification requirements being developed for Meaningful Use Stage 3 instead of creating unique standards for the Mass HIway project that could potential create serious barriers to adoption. Micky Tripathi will also be presenting the slide material to the HIT Policy Committee on July 9th as a framework for Meaningful Use Stage 3 certification requirements for query.

The idea is that there should be parsimony of transactions so there are not a series of transactions going back and forth between entities. There should simply be a query and a response.

The current approach, which is being driven by John Halamka at the HIT Standards Committee, utilizes a model similar to the Representational State Transfer (REST) used in everyday internet transactions. This approach is different from what Hoda Sayed-Friel was describing for the XDS-A and XDS-B Integrating the Healthcare Enterprise (IHE) protocol. Some vendors have adopted the IHE approach, but there has not been full adoption across the market and implementations are relatively complex. The Standards Committee is pushing to move away from the IHE framework in the future, and the HIway Phase 2 approach is looking to anticipate what the new standard approach may be rather than using an approach that may be obsolete. A"RESTful" approach is not a standard, but more of a method of sending information. REST transactions have secure information embedded in Uniform Resource Locator (URL) information, and would eliminate the need for deep technical interfaces that take a long time to implement.

The details of the elements required in the send and receive process are displayed on the slide. There are certain items that need to be sent in a HIway query transaction including sender authentication, enough patient identifying information for the data holding organization to positively identify the patient, and authorization for the request. The current federal recommendation is that there are not tight requirements around what constitutes appropriate patient matching or what constitutes appropriate authorization because there is too much variation in the market. Due to the current

variation in the requirements for patient matching and patient authorization, the federal government is unable or unwilling to develop a standard. Organizations can determine how to respond to a record request and there are no current standards set for the format of response due to the variances in EHR abilities to send information.

- Question (Meg Aranow): In reference to the REST approach utilizing a similar method to using URLs to send information; internet organizations can also provide tracking numbers for orders placed. Would participants have the ability to receive a tracking number for HIway transactions?
    - o Answer (Micky Tripathi): All HIway transactions are sent point-to-point. A tracking number would not be needed for this type of transaction. All transaction logging and disclosure tracking would occur in an organization's EHR and not by the HIway.

(Slide 34) Mass HIway Phase 2 Consent Approach: Patient consent on both sides of transaction - The council was briefed on the Phase 2 consent approach. The Relationship Listing Service (RLS) is a linking of a patient with a clinical entity that has medical records on that patient. The RLS would only display patient relationships to healthcare organizations, and would not contain any clinical information. The RLS would display a patient name, institution that the patient has a relationship with, medical record number, date of last event at the institution, and number of events reported at the institution.

The patient consent must be displayed at both ends of a transaction. One constraint to this is that EHR systems are very crude in their ability to capture consent. Most EHRs only have the ability to capture one bit for patient consent. Some organizations may already be using the one consent flag area for something else, and this would need to be discussed in the HIway on-boarding process. The EHR should capture the patient consent to publish, and the consent to view/retrieve can be relayed in the query message to the RLS. The current approach does not make an assumption of greater consent capturing capabilities, because most EHRs are limited to one bit.

There are two consent indicators that must be captured in the Phase 2 approach:

- Consent to Publish - Patient consent is required to share and publish information on the RLS. This has a huge policy implication because the information is being hosted and made available by the state of Massachusetts. An Admission, Discharge, Transfer (ADT) message is generated when a patient registers at an organization and the consent preference is captured. The RLS will store the consent flag sent in an ADT message, but the data holding organization has the responsibility to retain consent documentation. If the consent flag is "yes," the relationship will be listed on the RLS.
- Consent to View/Retrieve – Patient consent is also required for a provider to search the RLS for patient information. The RLS can receive a consent flag in an (ADT) query message indicating that the provider attests they have received the patient's authorization to view and retrieve information. , The data requesting organization has the responsibility to retain consent documentation for the request.

More work is needed to determine how formalized the consent must be on each side of the transaction. Implied consent may be an acceptable option on one side of the transaction, but these are decisions that must be made from a legal and policy perspective before the approach can be solidified and will be discussed at length at the Advisory Groups.

(Slide 35) Data Holder Publishes patient/entity relationship to RLS – The Council was briefed on the workflow for patient relationship being published to RLS. A patient has an opportunity to provide a "yes" or "no" consent for each individual legal entity. An ADT message is sent to the RLS that contains a consent bit, and some systems may have the ability to filter messages with a "no" consent flag from being sent to the RLS. Assuming that organizations are not filtering the messages, if the consent bit is recorded as a "no," the ADT message is rejected by the HIway and no information is stored in the RLS. The RLS will also remove any information sent in the ADT that is not required for patient relationship listing, such as billing information, insurance information, reason for visit, or chief complaint. Logic will also need to be created for how to handle multiple ADTs sent from one patient visit. The logic with help determine how to consolidate and/or discard groups of ADT messages.

The RLS would toggle the consent flag on or off based on the most recent ADT provided. Information on the patient would only be available from the point in time that a "yes" consent is received. If the consent is toggled "off," and back "on" again, the information and visit count would start over from that point in time.

(Slides 36-37) Data requestor requests patient record: Data holder responds – The Council was briefed on the workflow for a record request made through the HIway. The RLS can be used even if a record query is not completed because it can be used to simply identify patient relationships with organizations. The Advisory Groups thought that having the RLS available would be valuable in itself, separate from using the RLS to initiate a record request. Another point of flexibility is that the RLS is not required for an organization to make a query through the HIway. If an organization already knows where a patient relationship exists, or the patient indicates a relationship, a query/retrieve transaction can be completed without the use of the RLS as long as the patient consents.

(Slide 38) Possible Patient Options – The Council was briefed on the potential options for patient integration with the HIway. The largest barrier to patient integration with the HIway is the question of how to validate patient identities and provide patients with a Direct address. One of the major issues is resolving who will take responsibility for validating and on-boarding a patient for the HIway. This would be a HIway business process that would need to be developed for determining who can validate a patient and provide a Direct address. There are three proposed options for patient integration if the authentication issues are resolved:

- Patients could receive records through the HIway if provider/organizations send the record to the patient's Direct address.
- Patients could log-in to the HIway to view the RLS information available on themselves, and an audit log for information on who has viewed their RLS information. Patient managed consent directly through the HIway would be a large barrier. Synchronization of consent back to EHRs

may be impossible right now as EHRs cannot consume consent information coming in from an outside source.

- o Comment (Larry Garber): Patients may not need to "log-in" to view the RLS information. Patients could potentially go to a website and request an audit log be sent to their Direct address.

(Slide 39) Next Steps – The Council was briefed on the next steps for the HIway Advisory Groups. The Advisory Groups will be asked to provide feedback on the Phase 2 design approach. In the next set of meetings, the discussions will drill down into more of the details of the design approach.

There will be customer discovery sessions that will include discussions of the overall design with specific provider organizations. The goal will be to discuss the process in depth and ask for feedback on the value of each component and any barriers or issues that the organizations may identify. The design will also be tested beyond the "base case" in more complicated scenarios that include sensitive conditions and other additional considerations.

Discussion Item 3: Mass HIway Update presented by the Executive Office of Health and Human Services CIO, Manu Tandon, and the Director of Health Information Exchange at MeHI, Sean Kennedy (slides 40-48)

In lieu of the scheduled meeting time ending at this point of the agenda, Secretary Polanowicz asked Manu Tandon and Sean Kennedy to briefly provide any key updates on the Mass HIway Project. Secretary Polanowicz requested moving Sean Kennedy's Last Mile update presentation to the front of the agenda for the next HIT Council meeting.

Manu Tandon briefly informed the Council of two additions to the Phase 2 overall timeline on Slide 48:

- Phase 2 Requirements Gathering & Validation – Target Date: July 26, 2013
- Phase 2 Design Approach Decision – Target Date: August 2, 2013

Sean Kennedy briefly commented on the feedback received from Office of the National Coordinator (ONC) on the Strategic and Operational Plan (SOP) update. ONC gave MeHI a "gold star."

Discussion Item 4: Wrap-up and next steps (slides 49-51) presented by EOHHS CIO, Manu Tandon

See slides 49-51 of the presentation. The following are explanations from the facilitator and comments, questions, and discussion among the Council members that are in addition to the content on the slides

The next HIT Council meeting is August 5th on the 21st floor. Please refer to information posted to the web site. The preliminary agenda for the next Council meeting was reviewed.

The HIT Council meeting was adjourned at 5:05pm.